

SI 322 // Graphic Design & Visual Communications

Week 02 // Lab

Agenda

Activity	Tentative Time (min)
Image files formats and best practices	20
Hands on	30
Lab	60
Total time: 110	

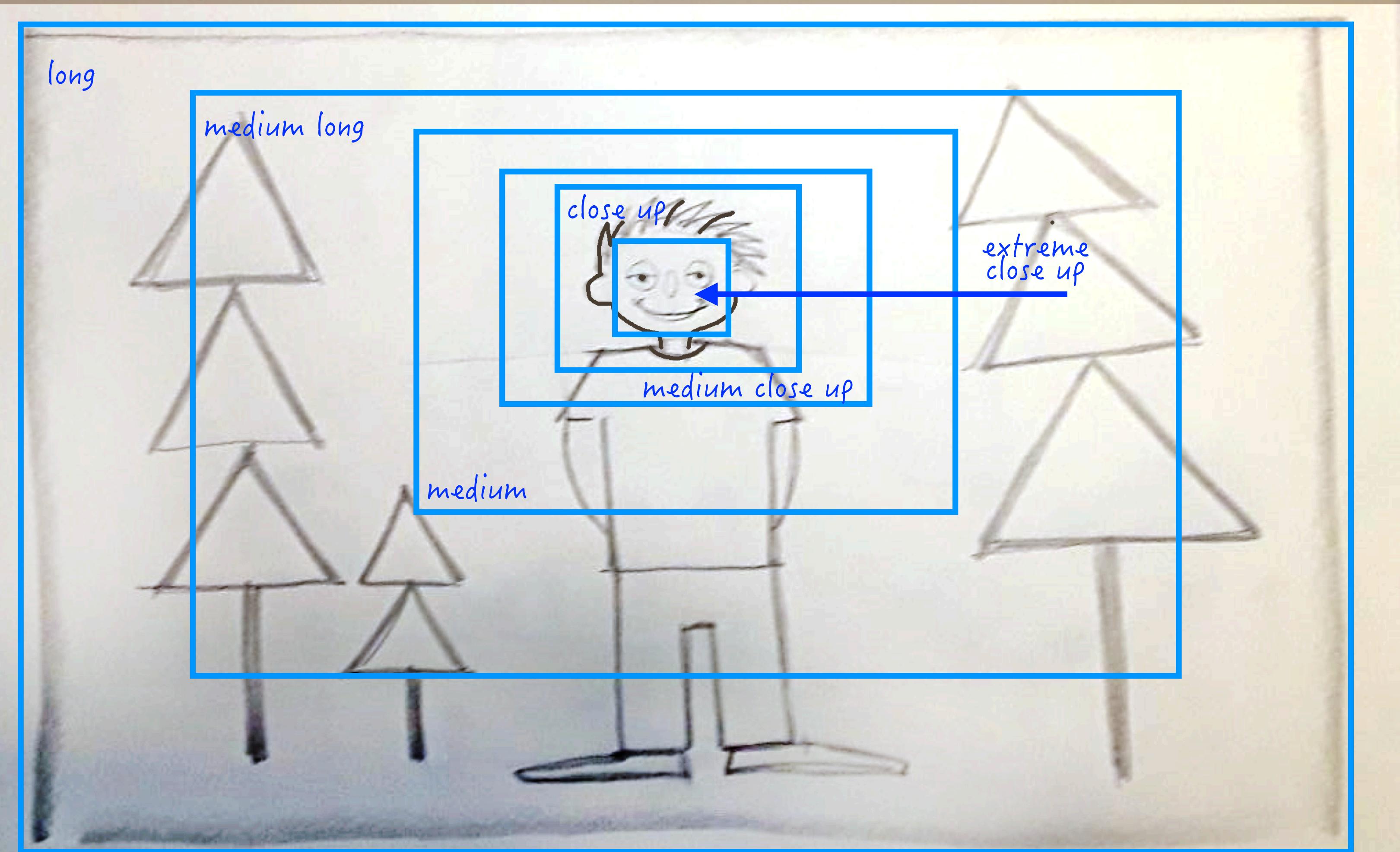


Image files best practices

- Use descriptive, keyword-rich file names for images - convenient for you /your team and great for search engines
- Use appropriate formats when optimizing/saving for web/mobile
- Adjust the image to the smallest file size while keeping an eye out for image quality.
- Use the most suitable file format for the image content
- Use consistent way to provide credits for the images in use

Image Types: Vector

- most useful for resizing
- retain details when scaled to any size; an excellent choice for logotypes/logomarks and icons.
- can be converted to a raster but will permanently lose the advantages of the vector format.
- Common extensions: SVG, EPS, EMF

Image Types: Raster

- best for complex images like photographs and illustrations
- common extensions: JPG, PNG, TIFF
- JPG – compressed raster format, often used for photos (universal – compatible with most software)
- PNG – raster format good for illustrations or icons (best for web use)
- TIFF – raster format that is best for high-resolution use

Image Properties: Raster

- File size - the size of a computer file (750 KB).
- Image size - vertical and horizontal dimensions (for example, 4X6" or 288 px X 432 px).*
- DPI - dots per inch (PPI - pixels per inch) - “density” of an image (raster only).
- Images may have the exact vertical and horizontal dimensions but different DPI.
- Image size, DPI, and file format may influence file size.

File Formats: Raster

- JPEG (or .jpg) is the standard image of the Web. JPEG images can be compressed considerably, which results in quality images with small file sizes. This format is the best for photos or illustrations.
- GIF (.gif) results in a lower-quality image than JPEGs and is used for more simple graphics such as icons and background patterns. GIFs also support animation.
- PNG provides excellent quality to both graphic elements and photos/illustrations. The file sizes can still be much larger than the same image in JPEG. PNG-24 image is three times larger in file size than the PNG-8 version.
- SVG - Scalable Vector Graphics is a vector image format for two-dimensional graphics with support for interactivity and animation.

File Formats: Raster

- TIFF is used for storing higher-resolution images and is used mostly for print projects.
- Many camera raw file formats, including IIQ (Phase One), 3FR (Hasselblad), DCR, K25, KDC (Kodak), CRW CR2 CR3 (Canon), ERF (Epson), MEF (Mamiya), MOS (Leaf), NEF NRW (Nikon), ORF (Olympus), PEF (Pentax), RW2 (Panasonic) and ARW, SRF, SR2 (Sony), are based on the TIFF file format.

File Formats: Raster

- .PSD file is an Adobe Photoshop Document, developed by Adobe Systems. It preserves layers, and effects, and allows you to edit these
- .PSD is your source file - always back it up, use it for future improvements of your work
- When you “Save as” or “Export” you create a new optimized file (JPG, GIF, PNG), and your .PSD file is still available on your drive

About Copyright

- Copyright is the area of law that deals with the creation, ownership, sale, and use of creative and expressive works
- Fair Use (Education)
- Creative Commons and other types of licenses

Fair Use: Four Statutory Factors

- **Purpose and Character of the Use:** education, scholarship, research, and news reporting, as well as criticism and commentary. Non-profit purposes also favor fair use
- **Nature of the Original Work** (published or not)
- **Amount** of the portion used
- Effect of the use on the potential sales



CC & more

"Creative Commons is a non-profit that offers an alternative to full copyright." - creativecommons.org

CC licenses allow material to be shared and reused under flexible and legally sound terms.

- CC BY: credit must be given to the creator.
- CC BY SA: Adaptations must be shared under the same terms.
- CC BY-NC: This license enables reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only
- CC BY-NC-SA: This license enables reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator.
- Public Domain

a woman in their bicycle repair shop



2166826123

+ Save

Comp

Remove background + AI

Modify with AI + AI

</> Embed

Buy print

Do not remove
watermarks ever

All Royalty-Free licenses include global use rights, comprehensive protection, simple pricing with volume discounts available ?

<input type="radio"/> Small	\$175.00
<input checked="" type="radio"/> Medium	\$375.00
<small>1864 x 1613 px (6.21 x 5.38 in) 300 dpi 3 MP</small>	
<input type="radio"/> Large	\$499.00
<input type="radio"/> Market-freeze	<small>Protect your creative work - we'll remove this image from our site for as long as you need it.</small>

\$375.00 USD

ADD TO CART

GET THIS IMAGE FOR \$325

DETAILS

Credit: [German Adrasti](#)

Creative #: [2166826123](#)

License type: [Royalty-free](#)

Collection: [F](#)

Take-away

- School work which you do not distribute, sell, or showcase outside of the class / prospective employers (password-protected portfolio) = fair use
- Plan to put this work to your public-facing website? Aim for CC-licensed images (pixabay, unsplash, etc.)
- Designer comps (images with watermarks) from photo stock websites - follow the site regulations. Using a watermarked image in a public portfolio or a final product without purchasing the license is a violation of copyright law.

AI Mode

All

Images

Shopping

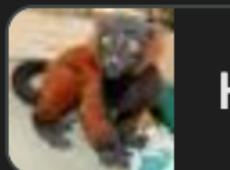
Videos

Forums

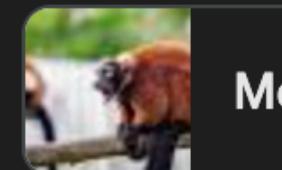
Short videos

More ▾

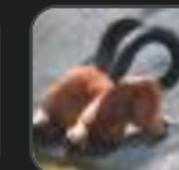
Saved



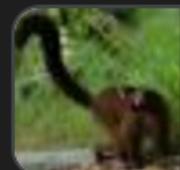
Hybrid



Monkey



Red ruffed lemurs



Red bellied lemur



Brown lemur



Red fronted lemur

Tools ▾

Size

Color

Creative Commons licenses

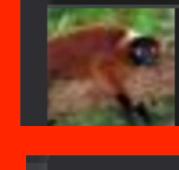
Type

Any time

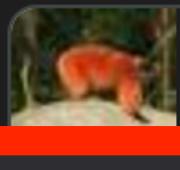
Advanced Search

Clear

About 46,300 results (0.32s)



Madagascar



Not filtered by license

Creative Commons licenses

Commercial & other licenses

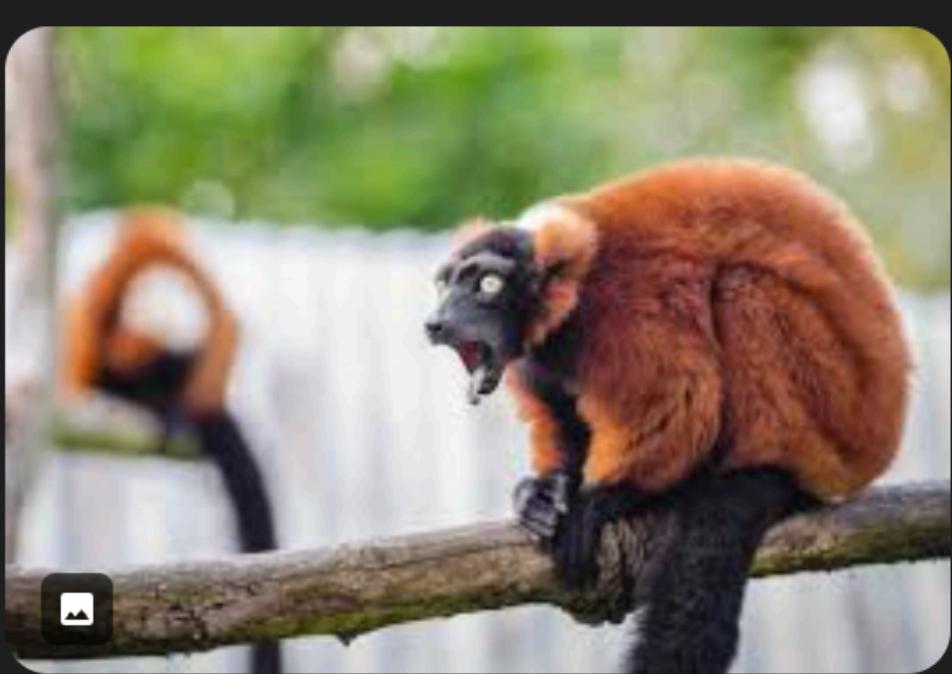
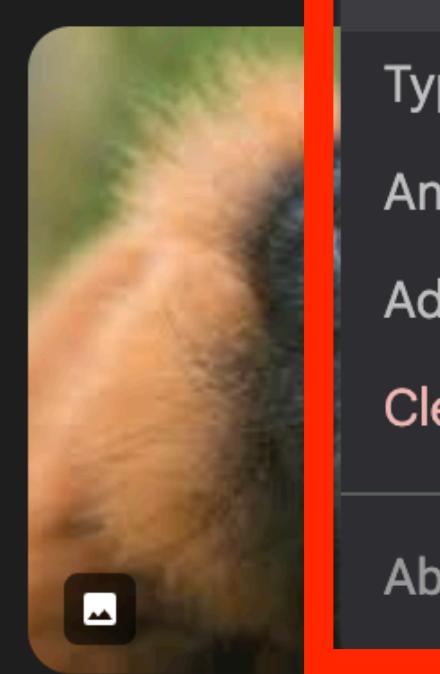
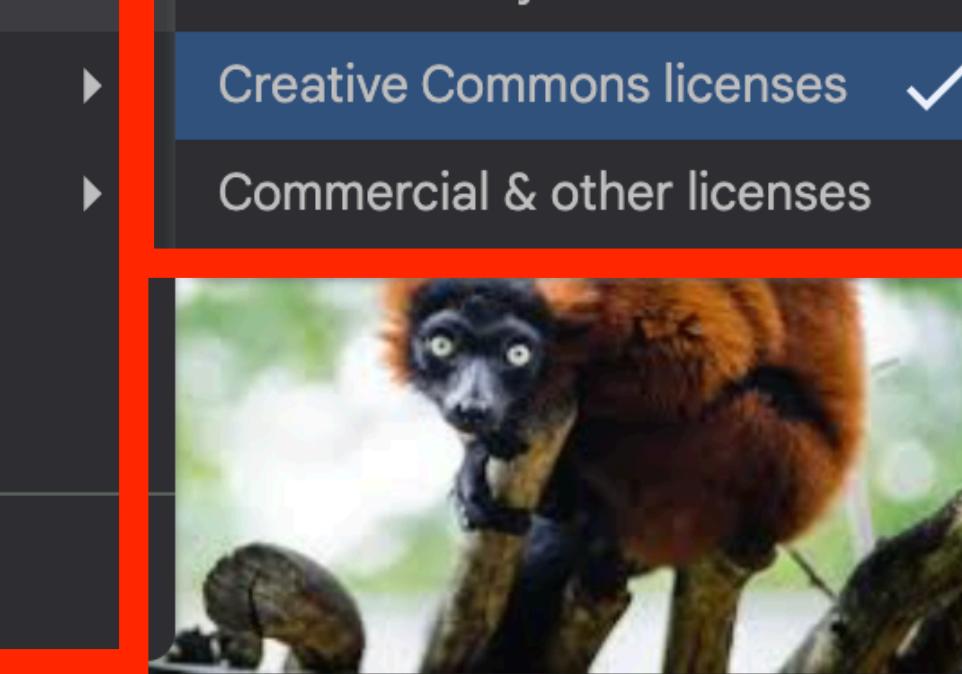
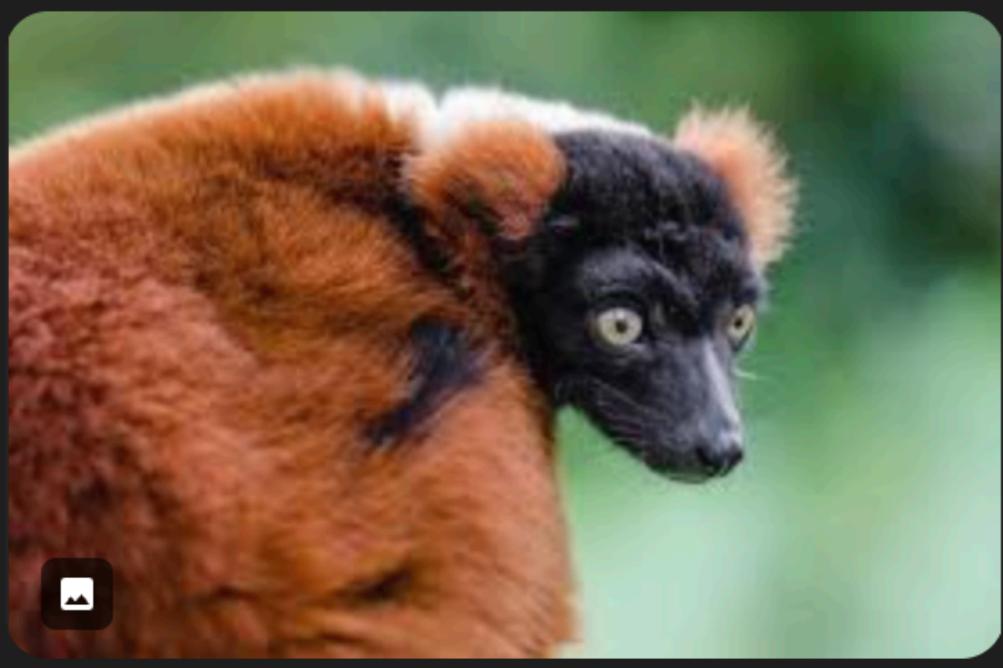
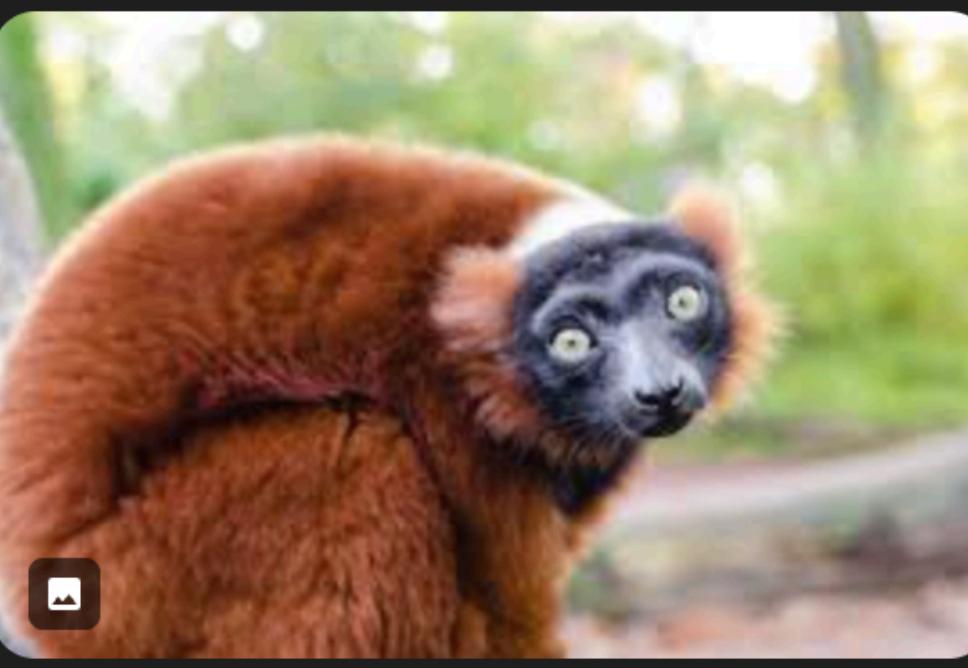
 Wikimedia Commons - Wikimedia.org
File:Red Ruffed Lemur (21184802764).jpg Animalia Bio
Red Ruffed Lemur - Facts, Diet, Habita... Wikimedia Commons - Wikimedia.org
File:Red ruffed lemurs grooming.jpg ... Flickr
Red-ruffed Lemur (Varecia rubra) ... Animalia Bio
Red Ruffed Lemur - Facts, Diet, Habita... StockVault
Red Ruffed Lemur - Free Stock Photo by ... Wikimedia Commons - Wikimedia.org
File:Red-Ruffed Lemur (16279104723).jp... Flickr
Ruffed Lemur (Madagascar) | ww... Collections - GetArchive
Red vari zoo monkey ... Wikimedia Commons
File:Red-ruffed Lemur (15438311688).jp...

Image Search Tools

Images Resources

- unsplash.com
- stock.adobe.com/free
- pixabay.com
- wikimedia.org
- burst.shopify.com
- www.pexels.com
- www.flickr.com
- storyblocks.com/images
- [The Met Open Collection](https://www.metmuseum.org/metopen)
- [search.creativecommons.org](https://creativecommons.org/search)

Shortcuts

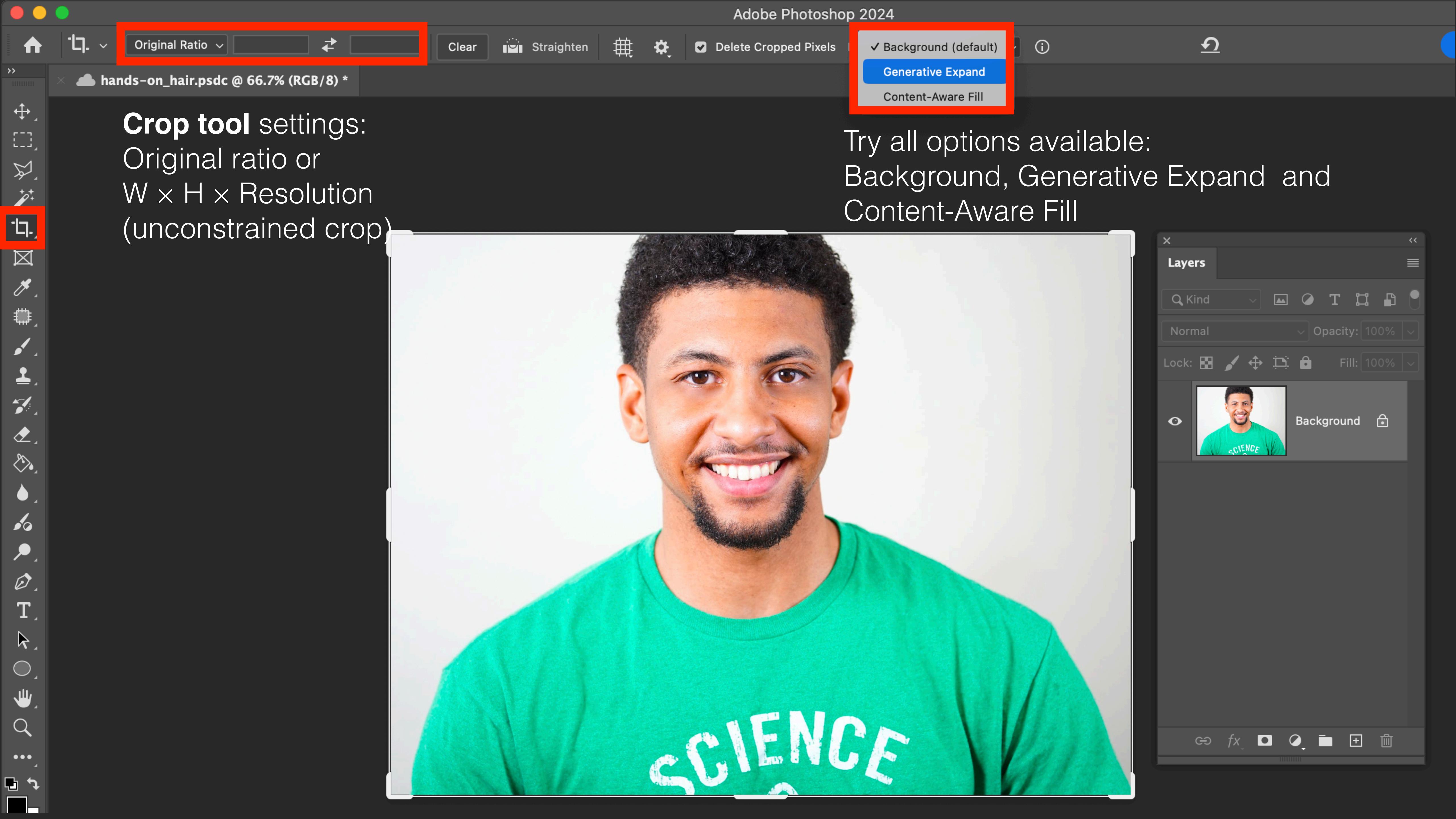
- CTRL+S = save
- CTRL+Z = undo
- CTRL+C = copy
- CTRL+V = paste
- **CTRL+A = select all**
- **CTRL+T = transform**
- CTRL+ = zoom in
- CTRL- = zoom out
- CTRL+0 = fit the screen
- CTRL+D=deselect
- **CTRL+W=close**
- **Ctrl+E=merge layers**

Hands-on:
Generative expand, patching
and Image cropping

Generative Expand

Crop tool settings:
Original ratio or
 $W \times H \times$ Resolution
(unconstrained crop)

Try all options available:
Background, Generative Expand and
Content-Aware Fill



Original Ratio Clear Straighten Delete Cropped Pixels Background (default) Content-Aware Fill

Layers

Normal Opacity: 100% Lock: Fill: 100%

Background

File > Export > Quick export as PNG

Here, V3 of
Generative Expand
worked the best



Content-Aware Fill
Result: not good!



Layers

Q Kind Normal Opacity: 100% Lock: Fill: 100%

Continue hair

Background

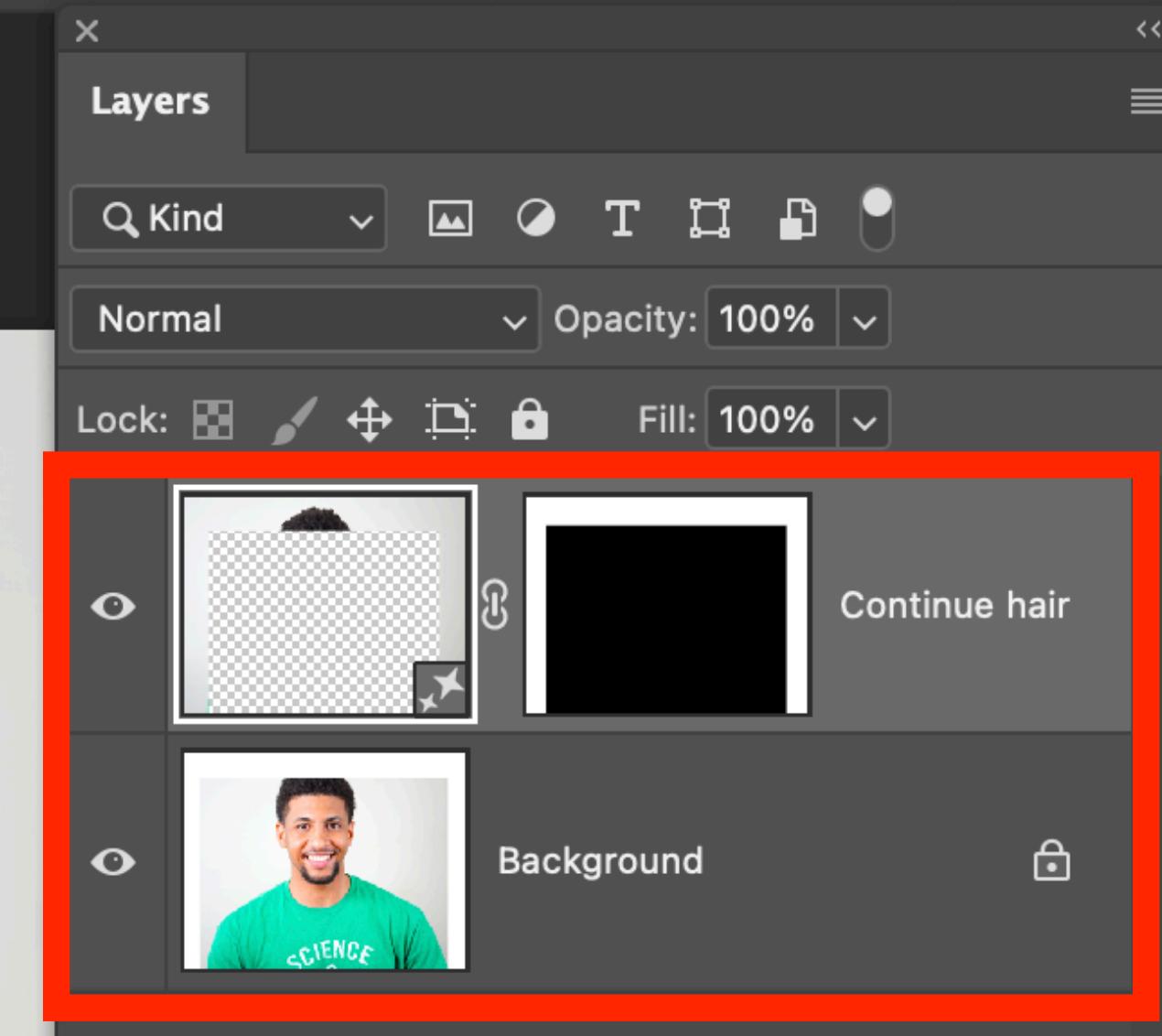
Properties

Generative Layer

Prompt: Continue hair

Generate

Variations 3/3



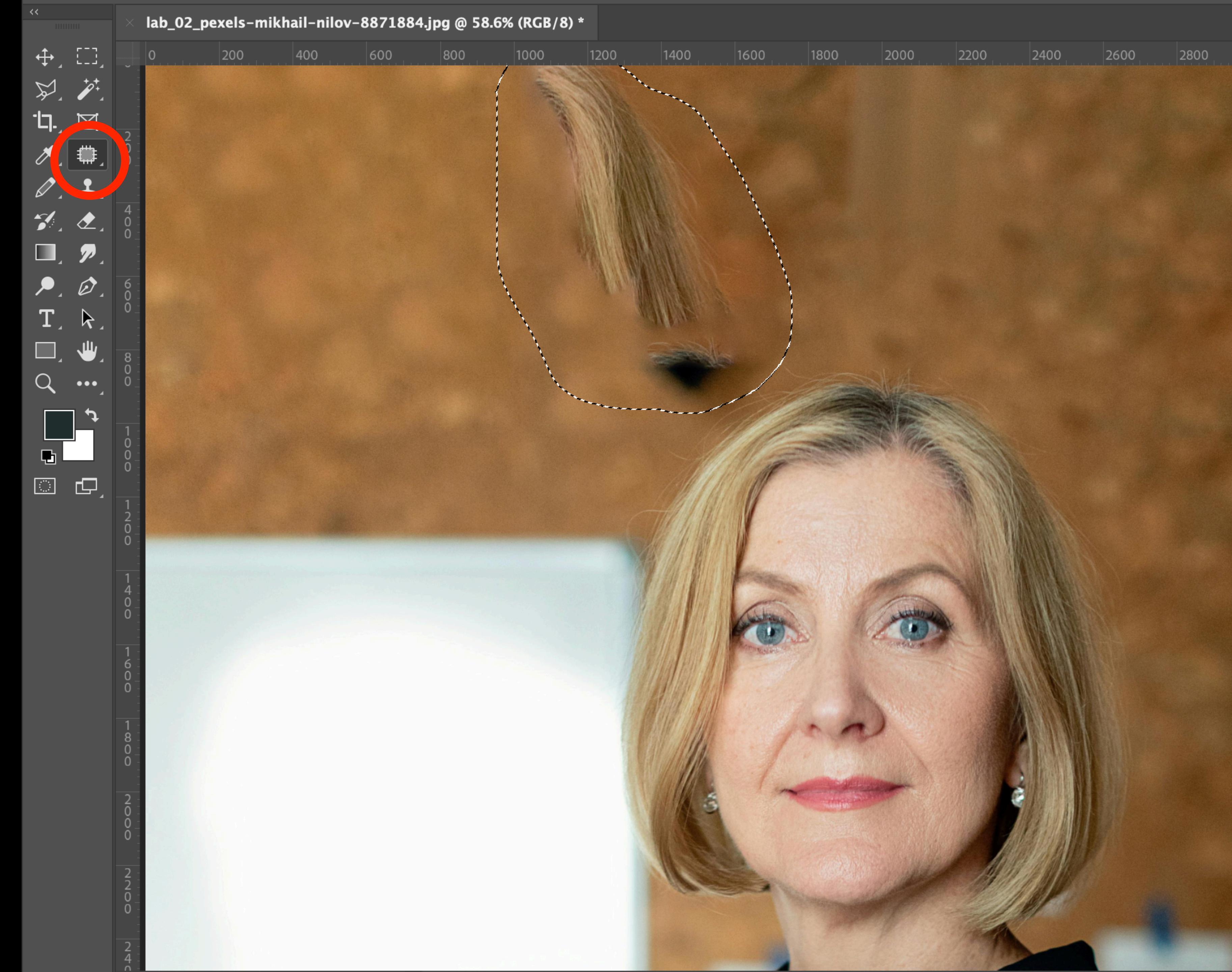
Patching or
Generative Fill

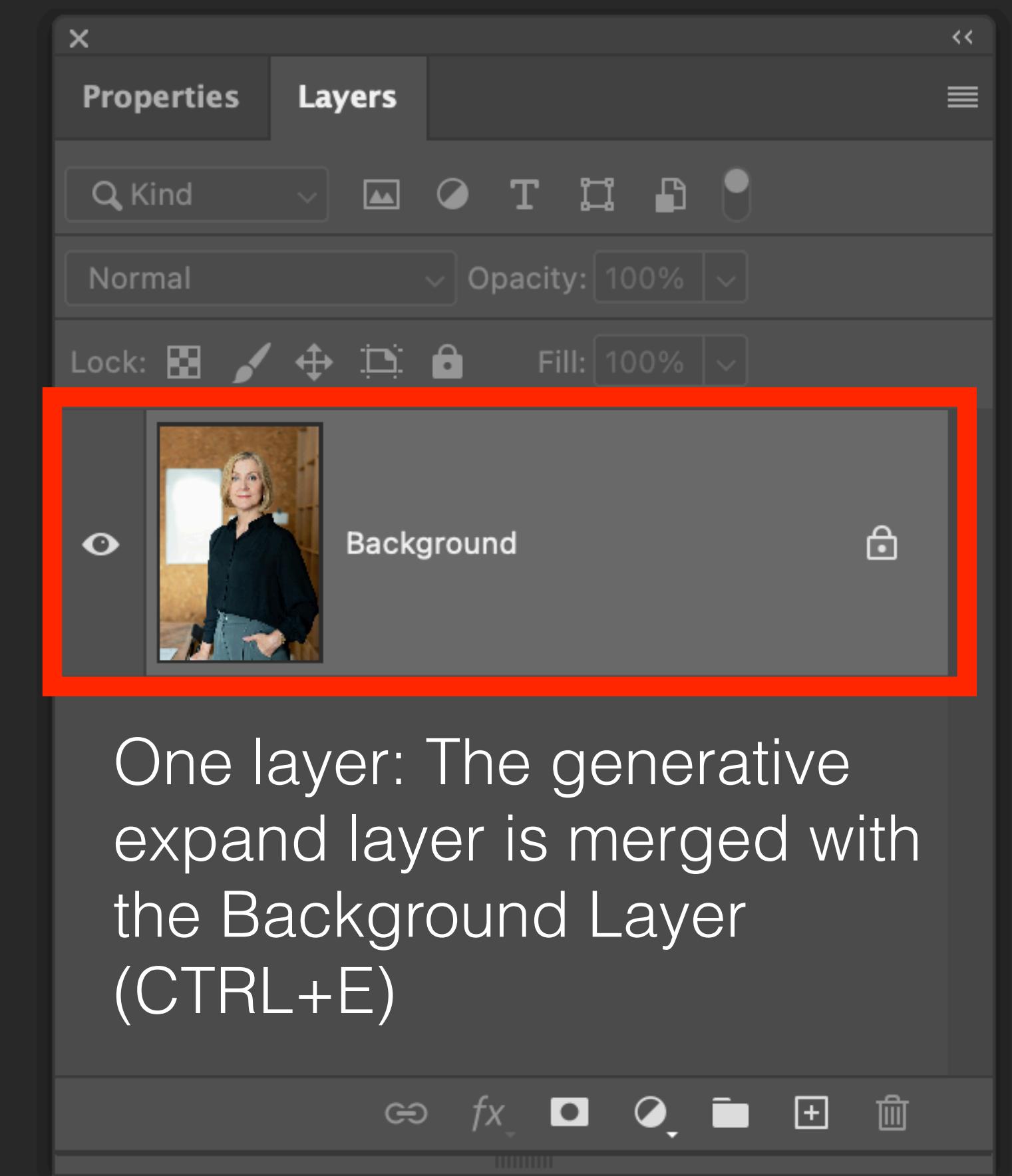
For better , more uniform “patching” results: on the Layers panel,
SHIFT+ select the layers you want to merge.

CTRL+E.

Select the **Patch tool** (J) from the toolbar (under the Spot Healing Brush).

With the Patch tool selected, draw a selection border over an area on your image that you want to replace and move it to the area you want to patch with (“source”).





File > Export > Quick export as PNG

Profile Crop:
The Rule of Thirds.
Ratio Crop.

Canvas Profile Picture

- Prepare your image using Photoshop. Use a medium close-up or close-up of yourself, keeping face/body ratio in mind. Use Generative Expand, Patching, or Fill if needed for better composition!
- Update your Canvas profile with this image, and if you'd like, update your UM Google profile for bonus points!
- Canvas is password-protected, so your photo won't be visible to anyone outside UM. It's optional to post a personal photo, but it can help others recognize you. Alternatively, you can use a medium close-up of your favorite animal. Please let us know your choice in the comments!





Medium shot



Medium close up



Close up

The ratio of face to body is important for our perception.

We perceive a person from the close shot as more intelligent. If a face takes up about 25% of the image or less, the whole image is perceived as focused on the sensuality and physical attractiveness of the person.



Joanna Kroll She/Her · 1st

Director | Adjunct Lecturer | Career
Michigan School of Information | Ga
Manager

Ann Arbor, Michigan, United States · [Contact info](#)

[500+ connections](#)



Vadim Besprozvany, Aalap Doshi

[Message](#)

[More](#)



Vadim (Вадим Беспрозванный)

He/Him · 1st

Design, Media and Cultural Studies; SI

Ann Arbor, Michigan, United States · [Contact info](#)

[My Profile on Academia.edu](#)

[500+ connections](#)



Aalap Doshi, Nathan Haynes-Magill

[Message](#)

[More](#)



Elena Godin She/Her

Designer, Researcher, Educator
Ann Arbor, Michigan, United States · [Contact info](#)

[500+ connections](#)

[Open to](#)

[Add profile section](#)

[Enhance](#)

Tell internal hirers you're interested in jobs at
your current company
[Get started](#)



Avalon Hu She/Her · 1st

Staff Designer at Adobe | Photoshop

New York City Metropolitan Area · [Contact info](#)

[500+ connections](#)



Pei-Yao Hung Ph.D, Kelly Kowatch, and 63 other mutual connections



University of Michigan -
School of Information

[Message](#)

[More](#)

About

Hi, my name is Avalon. I'm a designer and illustrator based in NYC. Currently I work as a Staff Designer on the Photoshop team at Adobe, focusing on new technologies and tools for next generation creators.

I have 5+ years experience working in agencies, collaborating with clients from various industries and des ...see more



hands_on_crop_andrew.png @ 100% (RGB/8)

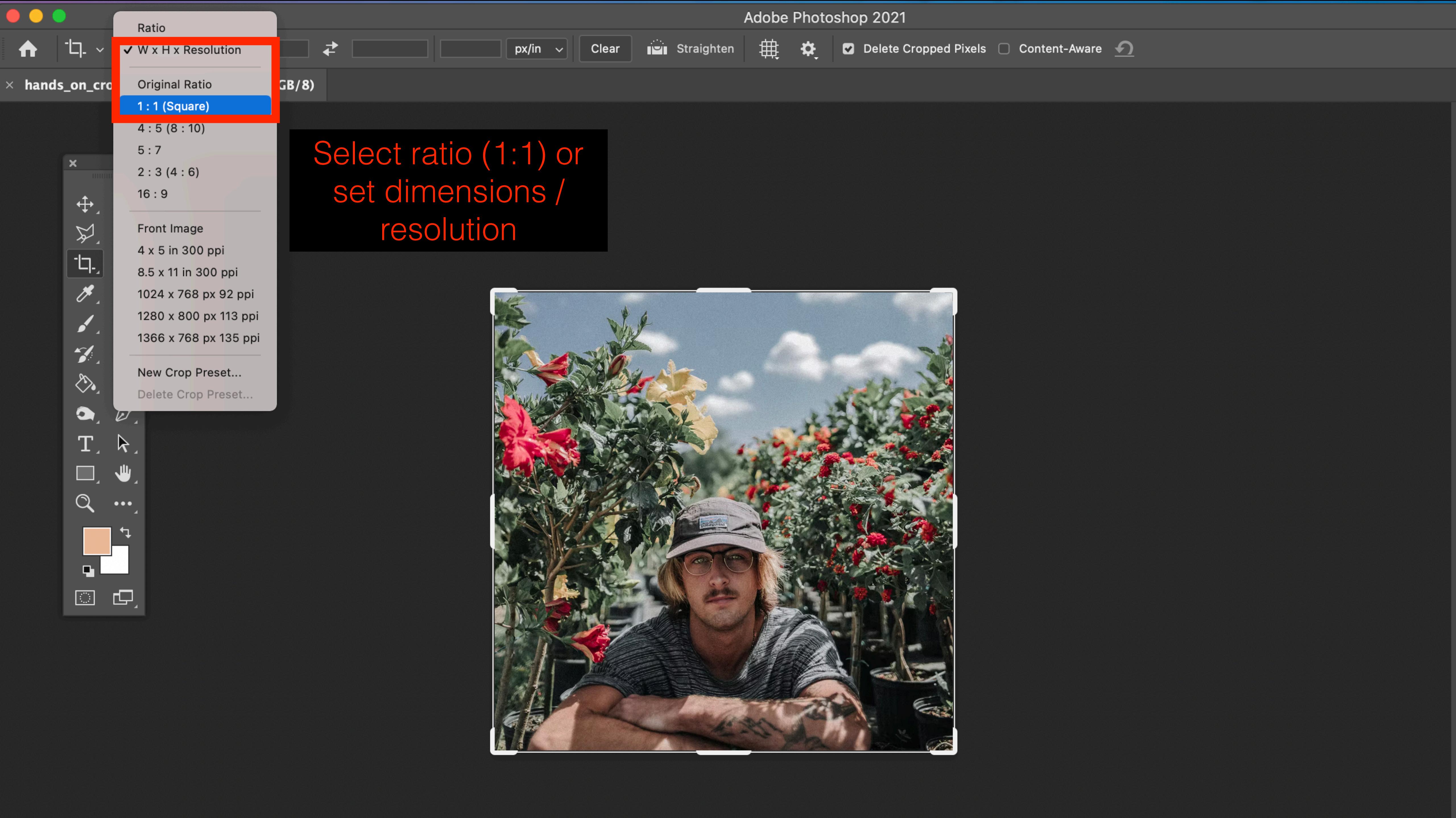


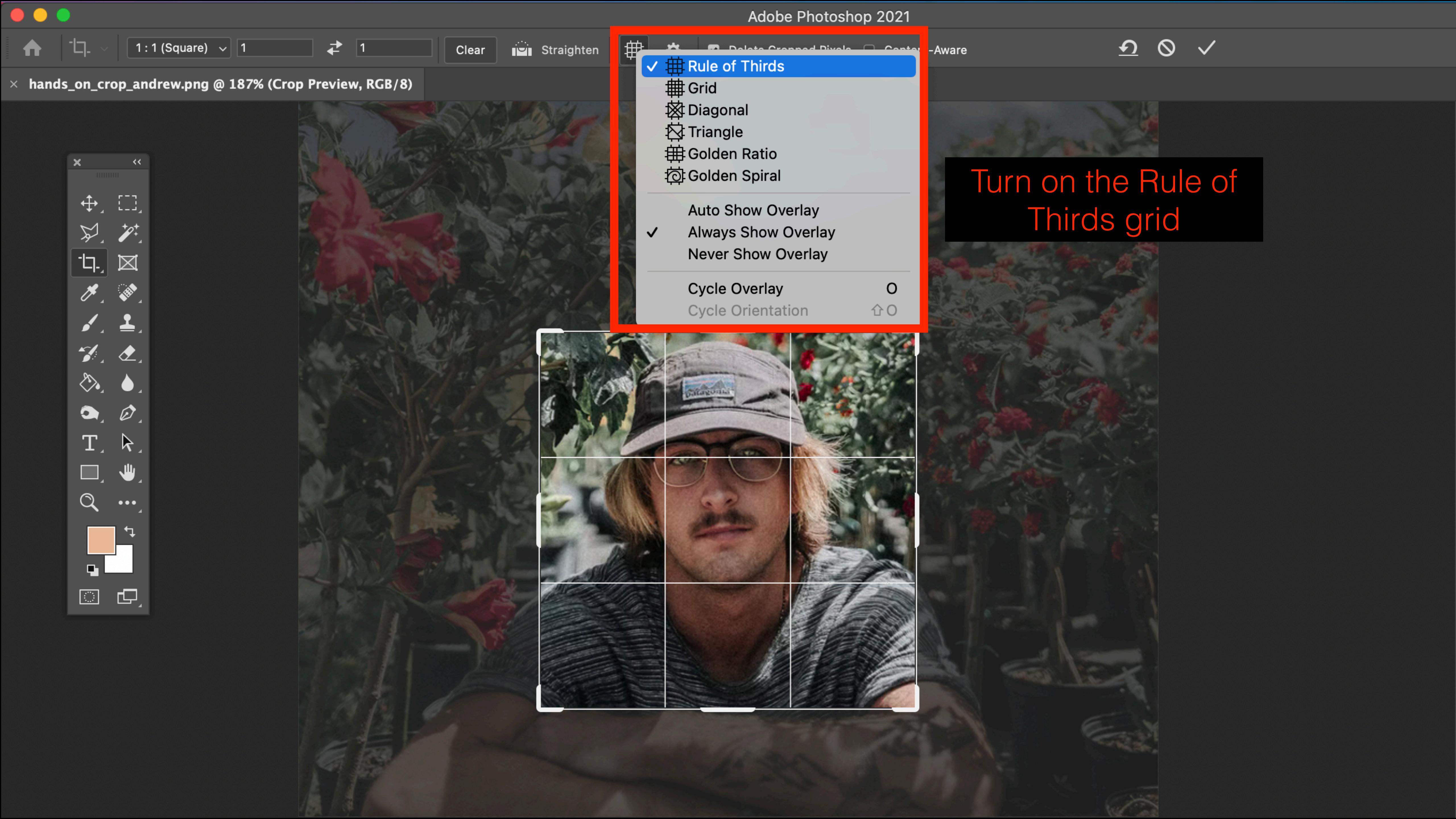
1. Select Crop tool

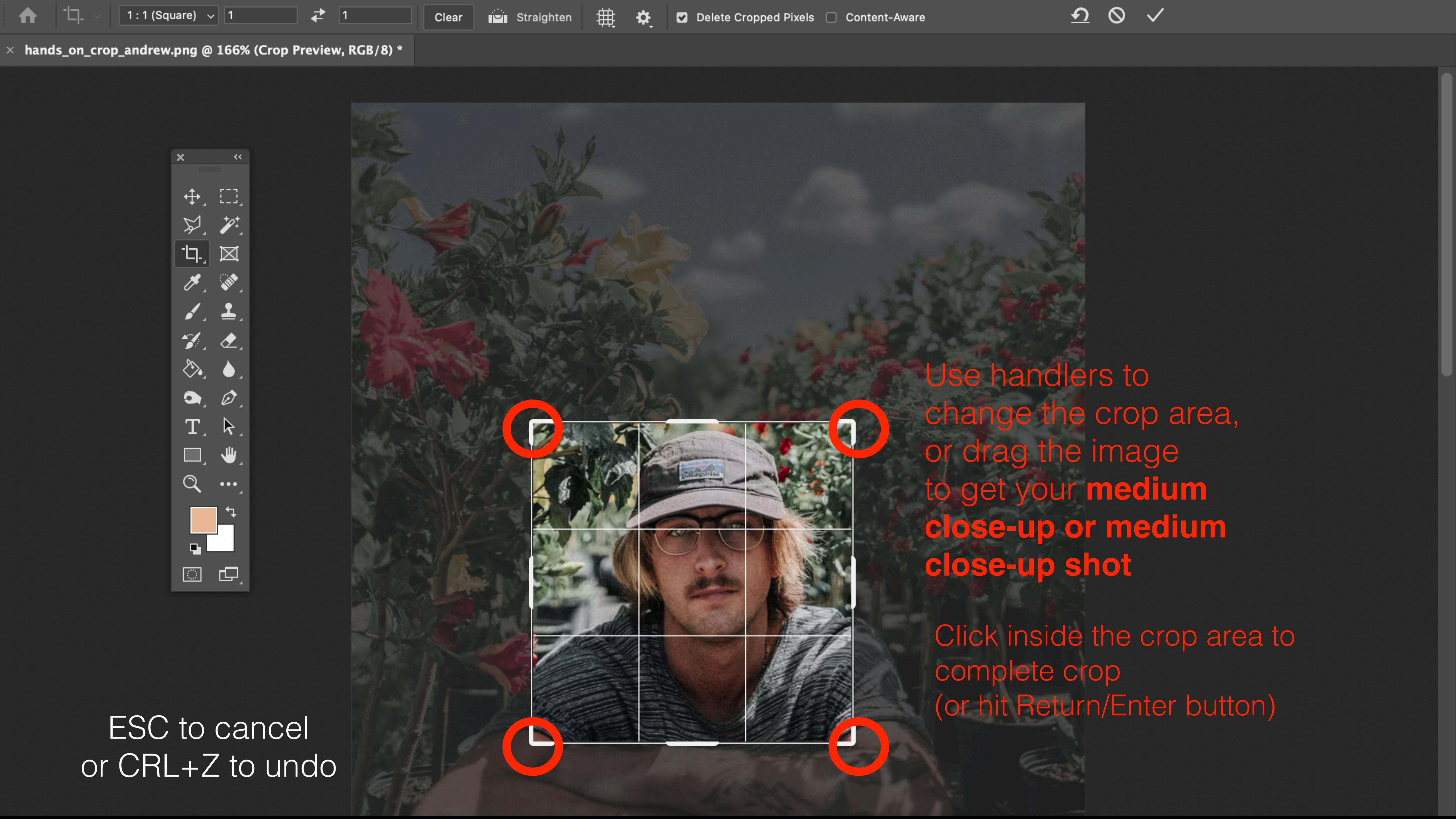


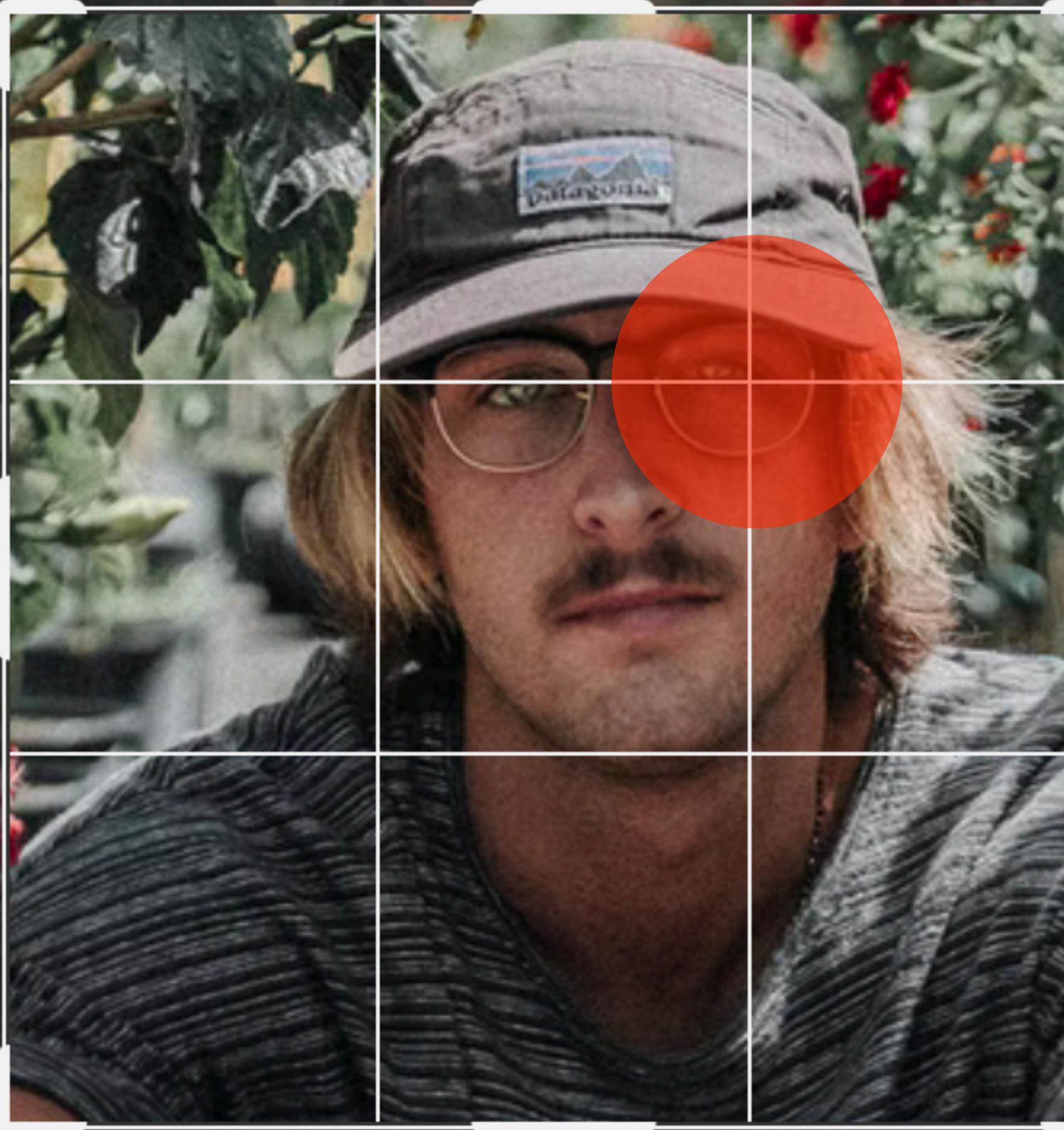
zoom in - CTR+
zoom out - CTRL-

Image by Seth Doyle

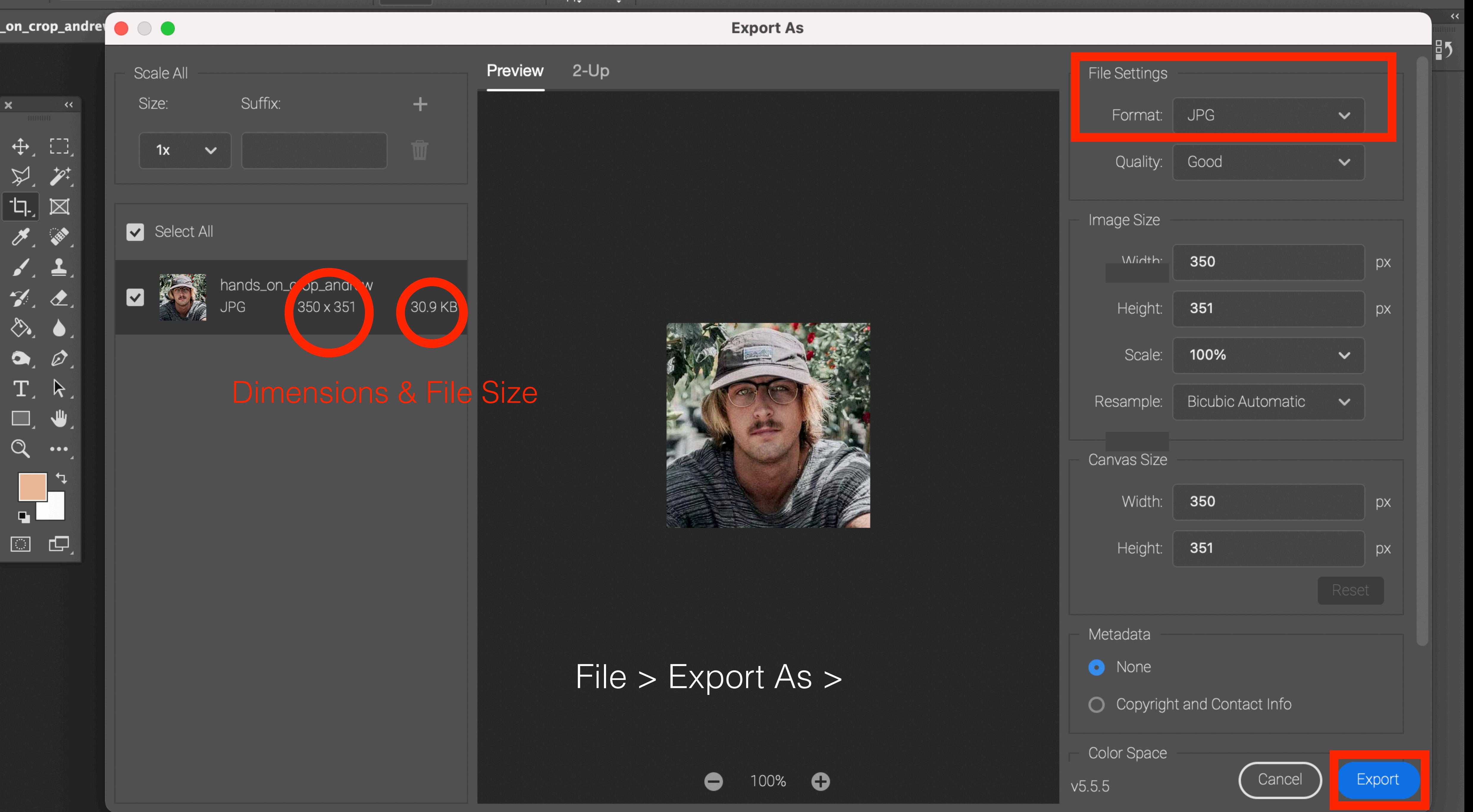








Attention to the Rule of Thirds:
The dominating eye in the
center, and another eye in the
power point



Hands-on Submission

- Organize all 3 images as multipage PDF. Submit as your Hands-On (Generative Expand, Patch/Fill, Personal Profile image)
- Update your Canvas and (optional) Google profile image.
- Google Profile image update counts toward your participation grade for this week (get +10 pts)
- NB: revisit your LinkedIn image

Lab 02

 Coxswain Design

[Log In](#) [Sign Up](#)

ABOUT WORK CLIENTS CONTACT BLOG

MEET OUR TEAM



Ashwin Santiago
Engineering Manager



Angela Long
Sales Manager



Anna Melioranza
Design Manager



Aditya Deo Kumar
Human Resources Manager



Brigitte Chen
Office Manager



Benjamin Speigel
Engineering Manager II



Beau Pettson
Innovation Manager



Findus Pettson
Intern



Jack Soloway
Creative Manager



Naak Bannarasee
Wellness Manager



Nadine Merlot
Food and Wine Manager



Namita Agarwal
Engineering Manager III



Randy Wilson
Communications Manager



Ruby Swenson
Growth Manager



Riley Lonely
Assets Manager



William Batiste
Relations Manager

 Coxswain Design

We help to define the art of the possible, then deliver that reality.

 **Australia**
544 The Willows
1st Floor , Suite 34
Fort Horaciobury 50623

 **Brazil**
26558 Stanton Hollow
3rd Floor, Suite 22
Fort Sybil 92671

Contact Us
hello@coxswaindesign.com

Lab 02

- Update the crops of the team page - the Figma file provided
- Aim for uniform crop / proportional headshots
- Adjust images as needed (exposure, shadows, etc.)
- Master image crop and adjustments
- Replace one of the team members with the matching image of you
- Save as (export) a PDF and post as a Hands-on submission to Canvas

The screenshot shows the Figma interface with a page containing four hot air balloons. The first balloon on the left is selected, and a context menu is open over it, with the 'Fill' option highlighted. The properties panel on the right shows the layer settings for the selected balloon.

In **Figma**, the image can be copy-pasted directly into a vector frame.

Click on the image to get access to the properties of the image.

There are four modes for image behaviour within the frame.

@Home

- Homework 02
- Tools & Panels to review - in the announcement
- Camera Angles - suggested reading